

# Oregon's Energy Sector Profiles



County	Baker	Benton	Clackamas	Clatsop	Columbia	Coos
County Seat	Baker City	Corvallis	Oregon City	Astoria	Saint Helens	Coquille
Area (Square Miles)	3,068	676	1,868	827	657	1,600
Population	16,510	91,320	404,980	38,225	50,795	63,190
Percent of Population is BIPOC	9%	19%	18%	14%	11%	15%
Number of Households	6,927	35,056	155,456	15,910	19,296	26,640
Regional Typical Household Income	\$41,098	\$49,802	\$60,286	\$46,408	\$60,286	\$38,605
Energy Burdened Households	39%	28%	14%	23%	21%	30%
Federal Poverty Level for Family of Three	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00
200% Federal Poverty Level	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00
Annual Energy Burden Gap	\$720	\$725	\$468	\$422	\$549	\$597
Homes Built before 1990	72%	65%	61%	70%	65%	76%
Owner-occupied Homes	66%	58%	68%	61%	73%	65%
Renter-occupied Homes	34%	42%	32%	39%	27%	33%
Average Annual Residential Electricity (kWh)	11,726	14,115	9,582	11,062	12,766	11,773
Average Annual Electricity Cost	\$1,169	\$1,529	\$1,177	\$1,236	\$1,053	\$1,445
Average Annual Residential Natural Gas (Therms)	759	663	663	663	663	663
Average Annual Natural Gas Cost	\$572	\$627	\$627	\$627	\$627	\$627
Electricity/Natural Gas Average Costs, Percent of Typical Income	4%	4%	3%	4%	3%	5%
Percent of Homes Electric Heat	28%	51%	43%	39%	52%	66%
Percent of Homes Natural Gas Heat	40%	40%	47%	43%	32%	6%
Percent of Homes Propane Heat	7%	1%	2%	3%	1%	3%
Percent of Homes Wood Heat	22%	6%	5%	10%	11%	19%
Average Annual Vehicle Miles Traveled per Household	20,665	20,958	21,472	21,825	24,064	21,058
Annual VMT Cost (gasoline, maintenance, repairs)	\$3,314	\$3,361	\$3,445	\$3,500	\$3,860	\$3,378
VMT as a Percent of Income	8%	7%	6%	8%	6%	9%
VMT as Percent of 200% Federal Poverty Level Income	15%	15%	16%	16%	18%	16%

See data information on Page 7.

## Oregon's Energy Sector Profiles

County	Crook	Curry	Deschutes	Douglas	Gilliam	Grant
County Seat	Prineville	Gold Beach	Bend	Roseburg	Condon	Canyon City
Area (Square Miles)	2,980	1,627	3,018	5,037	1,204	4,529
Population	21,580	22,600	176,635	110,395	1,980	7,410
Percent of Population is BIPOC	12%	14%	12%	12%	12%	8%
Number of Households	9,339	10,440	72,471	45,026	848	3,294
Regional Typical Household Income	\$37,106	\$40,884	\$51,223	\$41,312	\$44,293	\$38,406
Energy Burdened Households	42%	24%	27%	28%	38%	39%
Federal Poverty Level for Family of Three	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00
200% Federal Poverty Level	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00
Annual Energy Burden Gap	\$758	\$412	\$731	\$479	\$822	\$885
Homes Built before 1990	51%	64%	40%	69%	76%	75%
Owner-occupied Homes	69%	65%	65%	67%	61%	72%
Renter-occupied Homes	33%	35%	35%	33%	39%	28%
Average Annual Residential Electricity (kWh)	16,913	11,773	16,913	12,968	13,205	11,726
Average Annual Electricity Cost	\$1,464	\$1,445	\$1,464	\$1,387	\$1,396	\$1,169
Average Annual Residential Natural Gas (Therms)	759	-	759	585	-	-
Average Annual Natural Gas Cost	\$572	-	\$572	\$634	-	-
Electricity/Natural Gas Average Costs, Percent of Typical Income	5%	4%	4%	5%	3%	3%
Percent of Homes Electric Heat	47%	80%	47%	55%	54%	31%
Percent of Homes Natural Gas Heat	24%	1%	38%	25%	3%	2%
Percent of Homes Propane Heat	6%	3%	3%	1%	14%	6%
Percent of Homes Wood Heat	19%	14%	10%	15%	9%	40%
Average Annual Vehicle Miles Traveled per Household	21,237	19,435	22,106	21,260	22,893	22,189
Annual VMT Cost (gasoline, maintenance, repairs)	\$3,421	\$3,117	\$3,545	\$3,409	\$3,671	\$3,559
VMT as a Percent of Income	9%	8%	7%	8%	8%	9%
VMT as Percent of 200% Federal Poverty Level Income	16%	14%	16%	16%	17%	16%

See data information on Page 7.

## Oregon's Energy Sector Profiles

County	Harney	Hood	Jackson	Jefferson	Josephine	Klamath
County Seat	Burns	Hood River	Medford	Madras	Grants Pass	Klamath Falls
Area (Square Miles)	10,135	522	2,785	1,781	1,640	5,945
Population	7,320	24,735	213,765	22,790	84,675	67,410
Percent of Population is BIPOC	13%	36%	19%	40%	13%	22%
Number of Households	3,157	8,539	87,417	7,892	35,978	27,402
Regional Typical Household Income	\$37,580	\$55,827	\$44,028	\$43,366	\$37,665	\$40,336
Energy Burdened Households	40%	21%	27%	40%	34%	46%
Federal Poverty Level for Family of Three	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00
200% Federal Poverty Level	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00
Annual Energy Burden Gap	\$1,274	\$671	\$557	\$1,145	\$619	\$777
Homes Built before 1990	74%	63%	61%	55%	66%	69%
Owner-occupied Homes	69%	65%	62%	62%	66%	65%
Renter-occupied Homes	33%	35%	38%	38%	34%	33%
Average Annual Residential Electricity (kWh)	11,726	16,100	11,062	16,913	11,062	11,062
Average Annual Electricity Cost	\$1,169	\$1,334	\$1,236	\$1,464	\$1,236	\$1,236
Average Annual Residential Natural Gas (Therms)	-	663	585	759	585	585
Average Annual Natural Gas Cost	-	\$627	\$634	\$572	\$634	\$634
Electricity/Natural Gas Average Costs, Percent of Typical Income	3%	4%	4%	5%	5%	5%
Percent of Homes Electric Heat	40%	51%	54%	62%	53%	33%
Percent of Homes Natural Gas Heat	1%	30%	36%	10%	22%	40%
Percent of Homes Propane Heat	6%	3%	1%	4%	2%	2%
Percent of Homes Wood Heat	31%	13%	7%	20%	18%	16%
Average Annual Vehicle Miles Traveled per Household	21,533	24,658	20,867	23,707	20,511	20,912
Annual VMT Cost (gasoline, maintenance, repairs)	\$3,454	\$3,954	\$3,346	\$3,802	\$3,290	\$3,353
VMT as a Percent of Income	9%	7%	8%	9%	9%	8%
VMT as Percent of 200% Federal Poverty Level Income	16%	18%	15%	18%	15%	15%

See data information on Page 7.

## Oregon's Energy Sector Profiles

County	Lake	Lane	Lincoln	Linn	Malheur	Marion
County Seat	Lakeview	Eugene	Newport	Albany	Vale	Salem
Area (Square Miles)	7,490	4,554	980	2,291	9,888	1,185
Population	8,015	365,940	47,735	122,315	31,705	333,950
Percent of Population is BIPOC	15%	18%	17%	15%	39%	34%
Number of Households	3,494	150,780	21,110	47,030	10,138	116,861
Regional Typical Household Income	\$32,369	\$44,103	\$42,101	\$45,644	\$39,652	\$49,583
Energy Burdened Households	45%	29%	28%	26%	48%	28%
Federal Poverty Level for Family of Three	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00
200% Federal Poverty Level	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00
Annual Energy Burden Gap	\$861	\$643	\$532	\$586	\$799	\$583
Homes Built before 1990	67%	70%	67%	67%	78%	68%
Owner-occupied Homes	60%	59%	64%	64%	60%	60%
Renter-occupied Homes	40%	41%	36%	36%	40%	40%
Average Annual Residential Electricity (kWh)	14,181	11,131	12,412	14,115	13,300	9,582
Average Annual Electricity Cost	\$1,361	\$1,193	\$1,218	\$1,529	\$1,261	\$1,177
Average Annual Residential Natural Gas (Therms)	-	663	663	663	759	663
Average Annual Natural Gas Cost	-	\$627	\$627	\$627	\$572	\$627
Electricity/Natural Gas Average Costs, Percent of Typical Income	4%	4%	4%	5%	5%	4%
Percent of Homes Electric Heat	39%	73%	62%	50%	54%	51%
Percent of Homes Natural Gas Heat	2%	18%	23%	37%	28%	42%
Percent of Homes Propane Heat	6%	1%	2%	2%	4%	1%
Percent of Homes Wood Heat	26%	7%	11%	9%	8%	4%
Average Annual Vehicle Miles Traveled per Household	20,131	19,844	21,119	22,276	22,179	20,996
Annual VMT Cost (gasoline, maintenance, repairs)	\$3,229	\$3,182	\$3,387	\$3,572	\$3,558	\$3,367
VMT as a Percent of Income	10%	7%	8%	8%	9%	7%
VMT as Percent of 200% Federal Poverty Level Income	15%	15%	16%	16%	16%	16%

See data information on Page 7.

## Oregon's Energy Sector Profiles

County	Morrow	Multnomah	Polk	Sherman	Tillamook	Umatilla
County Seat	Heppner	Portland	Dallas	Moro	Tillamook	Pendleton
Area (Square Miles)	2,033	435	741	823	1,102	3,215
Population	11,745	790,670	79,730	1,795	25,920	79,880
Percent of Population is BIPOC	40%	30%	22%	8%	16%	34%
Number of Households	3,959	321,968	29,692	736	10,816	26,886
Regional Typical Household Income	\$48,614	\$60,286	\$49,583	\$38,362	\$42,581	\$48,614
Energy Burdened Households	40%	24%	23%	38%	39%	29%
Federal Poverty Level for Family of Three	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00
200% Federal Poverty Level	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00
Annual Energy Burden Gap	\$1,122	\$541	\$662	\$604	\$658	\$761
Homes Built before 1990	63%	74%	56%	85%	63%	72%
Owner-occupied Homes	70%	54%	64%	62%	72%	63%
Renter-occupied Homes	30%	46%	36%	38%	28%	37%
Average Annual Residential Electricity (kWh)	13,205	9,582	10,587	13,205	12,621	15,397
Average Annual Electricity Cost	\$1,396	\$1,177	\$1,006	\$1,396	\$1,228	\$1,287
Average Annual Residential Natural Gas (Therms)	-	663	663	759	663	759
Average Annual Natural Gas Cost	-	\$627	\$627	\$572	\$627	\$572
Electricity/Natural Gas Average Costs, Percent of Typical Income	3%	3%	3%	5%	4%	4%
Percent of Homes Electric Heat	70%	43%	54%	60%	75%	57%
Percent of Homes Natural Gas Heat	8%	50%	34%	1%	1%	30%
Percent of Homes Propane Heat	10%	1%	1%	2%	2%	4%
Percent of Homes Wood Heat	8%	1%	7%	16%	18%	7%
Average Annual Vehicle Miles Traveled per Household	24,602	16,985	22,595	22,489	22,499	23,432
Annual VMT Cost (gasoline, maintenance, repairs)	\$3,945	\$2,725	\$3,623	\$3,607	\$3,608	\$3,757
VMT as a Percent of Income	8%	5%	7%	9%	8%	8%
VMT as Percent of 200% Federal Poverty Level Income	18%	13%	17%	17%	17%	17%

See data information on Page 7.

## Oregon's Energy Sector Profiles

County	Union	Wallowa	Wasco	Washington	Wheeler	Yamhill
County Seat	La Grande	Enterprise	The Dalles	Hillsboro	Fossil	McMinnville
Area (Square Miles)	2,037	3,145	2,381	724	1,715	716
Population	26,745	7,140	26,700	583,595	1,465	104,990
Percent of Population is BIPOC	11%	7%	25%	34%	15%	23%
Number of Households	10,481	3,165	10,266	216,507	661	36,197
Regional Typical Household Income	\$43,822	\$40,581	\$43,422	\$60,286	\$33,487	\$60,286
Energy Burdened Households	30%	36%	25%	16%	51%	22%
Federal Poverty Level for Family of Three	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00	\$21,720.00
200% Federal Poverty Level	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00	\$43,440.00
Annual Energy Burden Gap	\$712	\$1,035	\$597	\$497	\$941	\$680
Homes Built before 1990	77%	76%	74%	53%	68%	57%
Owner-occupied Homes	64%	67%	65%	60%	70%	67%
Renter-occupied Homes	36%	33%	35%	40%	30%	33%
Average Annual Residential Electricity (kWh)	11,726	11,062	13,628	9,582	13,205	14,161
Average Annual Electricity Cost	\$1,169	\$1,236	\$1,651	\$1,177	\$1,396	\$987
Average Annual Residential Natural Gas (Therms)	585	-	663	663	-	663
Average Annual Natural Gas Cost	\$634	-	\$627	\$627	-	\$627
Electricity/Natural Gas Average Costs, Percent of Typical Income	4%	3%	5%	3%	4%	3%
Percent of Homes Electric Heat	32%	29%	73%	44%	34%	65%
Percent of Homes Natural Gas Heat	46%	1%	12%	52%	1%	23%
Percent of Homes Propane Heat	4%	19%	2%	1%	12%	2%
Percent of Homes Wood Heat	15%	34%	11%	2%	36%	7%
Average Annual Vehicle Miles Traveled per Household	21,745	21,954	22,452	19,897	21,448	23,243
Annual VMT Cost (gasoline, maintenance, repairs)	\$3,487	\$3,520	\$3,600	\$3,192	\$3,440	\$3,729
VMT as a Percent of Income	8%	9%	8%	5%	10%	6%
VMT as Percent of 200% Federal Poverty Level Income	16%	16%	17%	15%	16%	17%

See data information on Page 7

# Oregon's Energy Sector Profiles

## About the Data

The profiles above for Oregon counties are a sample of residential data related to population, demographics, income, energy and transportation burden, and household characteristics. They paint a picture of how energy is used in each county, along with the nexus between energy and other important community attributes.

The table below shows the average of all Oregon counties across these data points. See endnotes for data sources.

Average All Counties	Title in County Tables	Description	Data Source
	County Seat	County seat is used to assign serving utility for energy data.	OR Blue Book <sup>1</sup>
2,072	Area (Square Miles)	Size of counties in square miles.	OR Blue Book <sup>1</sup>
111,785	Population	County population.	OR Blue Book <sup>1</sup>
19%	Percent of Population is BIPOC	Percent of county residents that are Black, Indigenous, or People of Color.	OR AHA Tool <sup>2</sup>
44,218	Number of Households	Includes single family and multi-family homes.	OR AHA Tool <sup>2</sup>
32%	Regional Typical Household Income	Households where energy costs exceed 6% of the household income.	OR AHA Tool <sup>2</sup>
\$20,578	Energy Burdened Households	Federal Poverty Level for a family of 3 in Oregon, as determined by U.S. Department of Health and Human Services' 2019 Guidelines.	Federal Poverty Guidelines <sup>3</sup>
\$43,156	Federal Poverty Level for Family of Three	This is calculated for a family of 3 to demonstrate eligibility for Weatherization Assistance Program funds: a household's income must be at or below 200% of Federal Poverty Level to be eligible. <sup>4</sup>	Calculated based on Federal Poverty Guidelines <sup>3</sup>
\$706	200% Federal Poverty Level	Annual Energy Burden Gap is the amount of money that a 200% of Federal Poverty Level household would need in order to reduce their annual energy burden to become 6% of their income. <sup>5</sup>	OR AHA Tool <sup>2</sup>
\$45,330	Annual Energy Burden Gap	The Regional Typical Household assumes a household income that is the median income for a region – in this case, the region is the specific County.	H+T Index <sup>6</sup>
67%	Homes Built before 1990	Older homes, such as those built before 1990, tend to use more energy per square foot than homes built under more-recent building	OR AHA Tool <sup>2</sup>

## Oregon's Energy Sector Profiles

		energy codes. Age of the home is often used to prioritize weatherization services. For more information on household characteristics, see Residential Sector Profile.	
65%	Owner-occupied Homes	Owned housing units, including single family, townhomes, condominiums, and manufactured homes.	H+T Index <sup>9</sup>
35%	Renter-occupied Homes	Rented housing units, including single family, townhomes, condominiums, and manufactured homes.	H+T Index <sup>9</sup>
12,642 kWh	Average Annual Residential Electricity (kWh) <sup>i</sup>	Average residential electricity use for the utility serving a particular county. Note that where more than one electric utility serves a county, costs are for the utility serving the county seat. To determine utilities serving a specific address, see ODOE's <i>Find Your Utility</i> interactive map. <sup>7</sup>	OPUC Stat Book <sup>8</sup>
\$1,290	Average Annual Electricity Cost	Average residential electricity costs for the utility serving a particular county. Note that where more than one electric utility serves a county, costs are for the utility serving the county seat. To determine utilities serving a specific address, see ODOE's <i>Find Your Utility</i> interactive map. <sup>7</sup>	OPUC Stat Book <sup>8</sup>
673 therms	Average Annual Residential Natural Gas (Therms)	Average annual natural gas use in homes, for those counties that have natural gas service. Therm is a standard metric of gas for billing purposes. <sup>ii</sup>	OPUC Stat Book <sup>8</sup>
\$615	Average Annual Natural Gas Cost	Average annual residential cost for natural gas, for those counties that have natural gas service.	OPUC Stat Book <sup>8</sup>

<sup>i</sup> A kilowatt-hour (kWh) is a measure of electricity use over time. A kWh is one thousand watt-hours, or the electric used by a 10-watt lamp for 100 hours. A one-thousand-watt appliance, like a space heater, would use one kWh in one hour.

<sup>ii</sup> A therm is about 100,000 British Thermal Units. One British Thermal Unit (BTU) is the amount of heat required to raise the temperature of one pound of water one-degree Fahrenheit.

## Oregon's Energy Sector Profiles

		Note that not all Oregon counties have natural gas service. To determine utilities serving a specific address, see ODOE's <i>Find Your Utility</i> interactive map. <sup>7</sup>	
4%	Electricity/Natural Gas Average Costs, Percent of Typical Income	This is a calculation based on the average energy costs of a county and the regional typical household income (above). Note that where more than one electric utility serves a county, costs are for the utility serving the county seat. To determine utilities serving a specific address, see ODOE's <i>Find Your Utility</i> interactive map. <sup>7</sup>	OPUC Stat Book <sup>8</sup>
51%	Percent of Homes Electric Heat	Percent of households that primarily use electricity to heat their homes, including electric furnaces, boilers, heat pumps, and zonal heat.	OR AHA Tool <sup>2</sup>
23%	Percent of Homes Natural Gas Heat	Percent of households that primarily use natural gas to heat their homes, including natural gas furnaces, boilers, wall units, and stoves.	OR AHA Tool <sup>2</sup>
4%	Percent of Homes Propane Heat	Percent of households that primarily use propane to heat their homes, including propane furnaces, boilers, wall units, and stoves.	OR AHA Tool <sup>2</sup>
14%	Percent of Homes Wood Heat	Percent of households that primarily use wood to heat their homes, including wood stoves and pellet stoves.	OR AHA Tool <sup>2</sup>
21,701 miles	Average Annual Vehicle Miles Traveled per Household	Annual vehicle miles traveled by all vehicles in a household, using the vehicle use methodology from H+T Index. <sup>10</sup>  Note that the H+T Index's VMT methodology differs from VMT collected and used by Oregon Department of Transportation. <sup>iii</sup>	H+T Index <sup>9</sup>
\$3,481	Annual VMT Cost (gasoline, maintenance, repairs)	Annual VMT cost per household over a year includes gasoline, maintenance, and repairs, but does not include the cost to acquire a vehicle (like monthly car payments).	H+T Index <sup>9</sup>

<sup>iii</sup> The Vehicle Miles Traveled (VMT) estimates from the national Center for Neighborhood Technology (CNT) source were used in this effort, which differ from VMT collected by Oregon Department of Transportation. The CNT Housing and Transportation (H&T) Index data calculates VMT per vehicle, based on a model of urban, suburban, and rural driving habits combined with state population estimates. In comparison, ODOT calculates VMT on roads, as submitted annually to Federal Highway Administration (FHWA), by conducting physical counts of vehicles with sampling rates that favor state-owned roads.

## Oregon's Energy Sector Profiles

8%	VMT as a Percent of Income	The Regional Typical Household assumes a household income that is the median income for a region – in this case, the region is the specific County. This is the percent of that income spent on VMT costs for a median income household.	H+T Index <sup>9</sup>
17%	VMT as Percent of 200% Federal Poverty Level Income	This is the percent of that income spent on VMT costs for households at 200% of Federal Poverty Level.	Calculated based on Federal Poverty Guidelines <sup>3</sup>

### Data Sources

1. OR Blue Book: Oregon Secretary of State, Oregon Blue Book, County Government, <https://sos.oregon.gov/blue-book/Pages/local-county.aspx>
2. OR AHA Tool: Oregon Housing and Communities Services, Oregon Affordable Housing Assessment Tool, Compiled by TRC Companies, <https://www.oregon.gov/energy/Get-Involved/Documents/2018-BEEWG-AHA-Guide-Methodology.pdf>
3. Kaiser Family Foundation, Distribution of Population by Federal Poverty Level, <https://www.kff.org/other/state-indicator/population-up-to-200-fpl/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D>, calculations using data from Federal Poverty Guidelines, US Department of Health and Human Services, <https://aspe.hhs.gov/2019-poverty-guidelines> and 2008-2019 American Community Survey, 1-Year Estimates.
4. Oregon Housing and Community Services, Weatherization Assistance, <https://www.oregon.gov/ohcs/energy-weatherization/Documents/factsheets/factsheet-weatherization-assistance-program.pdf>
5. Fisher Sheehan & Colton, "The Home Energy Affordability Gap 2019" (2nd Series) published April 2019. [http://www.homeenergyaffordabilitygap.com/03a\\_affordabilityData.html](http://www.homeenergyaffordabilitygap.com/03a_affordabilityData.html)
6. H+T Index: Center for Neighborhood Technology, Housing and Transportation Index, Regional Typical Household, FAQ, <https://htaindex.cnt.org/faq/>
7. Find Your Utility: Oregon Department of Energy <https://www.oregon.gov/energy/energy-oregon/Pages/Find-Your-Utility.aspx>
8. OPUC Stat Book: Oregon Public Utility Commission, 2019 Utility Statistics Book, <https://www.oregon.gov/puc/forms/Forms%20and%20Reports/2019-Oregon-Utility-Statistics-Book.pdf>
9. H+T Index: Center for Neighborhood Technology, Housing and Transportation Index, County Fact Sheets <https://htaindex.cnt.org/map/>
10. H+T Index: Center for Neighborhood Technology, Housing and Transportation Index, VMT Methodology, <https://htaindex.cnt.org/about/>